The Humble Way

SPRING, 1961

Enco gasolines are now sold through Humble outlets in 21 western and midwestern states. The *Enco* oval is also used to identify the service stations, except in Texas and Ohio.

The Humble Way
Spring, 1961
Vol. XVI No. 3

THE BIG CHANGE TO ENCO

ENCO, the new brand name introduced by Humble last year in a few localized test markets, has now become the Company's trade name throughout 21 western and midwestern states.

Since May 12, when the big changeover was completed, the ENCO brand has been used for all gasolines sold through service stations in Humble's Central and Southwestern Regions and in Ohio. Certain other of the Company's products also bear the ENCO brand.

As a further step toward uniformity, ENCO—lettered in red in a white oval with a blue border—now appears as the identifying sign at all service stations selling Humble products in 19 of those 21 states. The exceptions are Texas and Ohio, where the station identification ovals continue to bear the Humble name, although the gasolines sold will be under the ENCO brand.

The changeover to the ENCO brand is probably the most significant marketing development since the formation of the new Humble Oil & Refining Company. Appropriately, it was brought to the public's attention through the largest advertising and promotion campaign ever undertaken by the Company.

In announcing the widespread change to ENCO, Humble's President Morgan J. Davis pointed out that the brand name and identification symbol have been under study ever since the new Humble Company was organized, about a year and a half ago. During those 18 months, the new Humble Company continued to market 12 different brands of gasoline and to operate under four different identification signs in the states served by the former Humble, Carter, Oklahoma, and Pate companies.

"A great deal of thought and market research went into finding an appropriate brand name," Mr. Davis said. "The brand finally selected was derived from the last two words—ENergy and COmpany—in the theme Humble has been using in its advertising for the past year: 'America's Leading Energy Company.' "

The new trade-mark was given a thorough test before it was adopted for widespread use, Mr. Davis said.

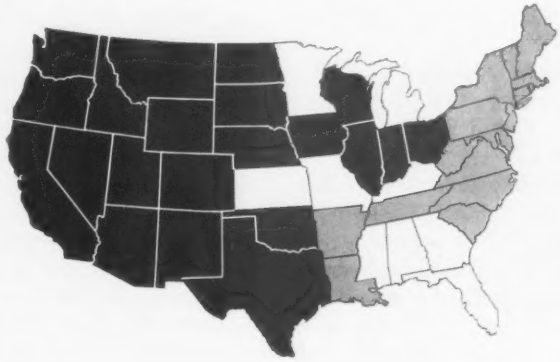
"In the summer of 1960," he said, "we began to market ENCO gasolines through Carter stations in the Pacific Northwest. Later in the year, we tested the ENCO identification sign in eastern Washington and western Montana and also introduced ENCO gasolines at Pate stations in Wisconsin.

"The name proved to be easily remembered and one that established a quick association with our theme, 'America's Leading ENergy COmpany.' Consequently, when Humble entered the California market late last year, we began selling ENCO gasolines under ENCO identification signs right from the start."

After studying the results obtained in these tests, Mr. Davis said, the Company decided to adopt the ENCO brand for use throughout the Midwest and West.

In this 21-state area, Humble's regular gasoline is now called ENCO and its premium gasoline is ENCO Extra. Where three grades of gasolines are marketed, as in Texas, the super-premium grade is now known as ENCO Golden.

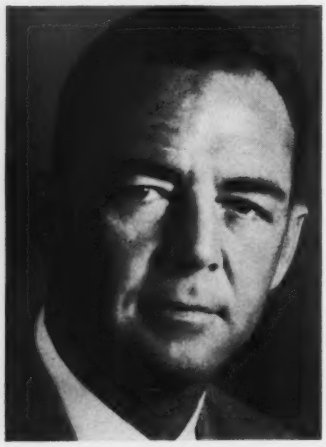
In the Southwest Region, the changeover to ENCO brand coincided with Humble's introduction of a new and improved line of high energy gasolines. This gave extra impetus to the advertising and promotion campaign.



STATES WHERE HUMBLE MARKETS *ENCO* PRODUCTS
STATES WHERE HUMBLE MARKETS *ESSO* PRODUCTS

With the adoption of the ENCO brand throughout the western part of the country, the Humble Company has reduced its brands of gasoline nationwide to only two. The Company's Eastern and Southeastern marketing regions will continue to sell products under the familiar Esso brand. All service stations selling Humble products throughout the United States will continue to display the word HUMBLE prominently spelled out in large block letters on the facades of the service stations.

John R. McMillan

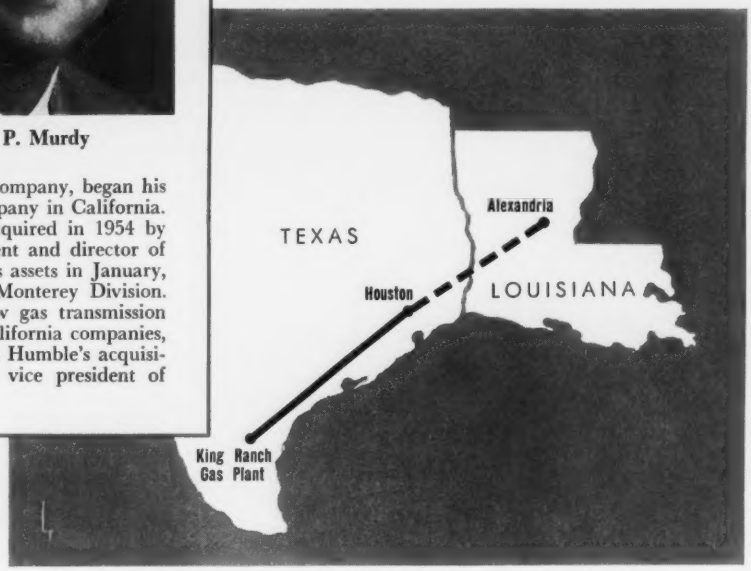


Donlin P. Murdy

Mr. McMillan, president of the new gas transmission company, began his career as a petroleum engineer with Barnsdall Oil Company in California. He later joined Fullerton Oil Company, which was acquired in 1954 by Monterey Oil Company. He was executive vice president and director of the latter company when Humble purchased Monterey's assets in January, 1961, after which he became president of Humble's Monterey Division.

Mr. Murdy, vice president and treasurer of the new gas transmission company, also has held executive positions in several California companies, including Fullerton and Monterey Oil companies. Since Humble's acquisition of Monterey's assets, Mr. Murdy has served as vice president of Humble's Monterey Division.

Solid line on map shows existing 30-inch gas pipe line being sold by Humble to new Monterey Gas Transmission Company. Dotted line is proposed extension to Alexandria.



Humble joins in forming MONTEREY GAS T

HUMBLE Oil & Refining Company announced on April 13 that it is joining in the formation of a new interstate pipeline company to be known as the Monterey Gas Transmission Company and that it will sell to the new Company, by a sale of natural gas in-place in Southwest Texas, reserves of 6.2 trillion cubic feet.

At the same time, the Columbia Gas System, Inc., announced that a System Company would enter into a long-term gas purchase contract under which it would purchase the gas to be produced from these reserves.

The initial shareholders of Monterey Gas are Humble Oil & Refining Company and Lehman Brothers, the New York investment firm. After Monterey Gas obtains a certificate of public convenience and necessity from the Federal Power Commission it is contemplated that, subject to clearance with the Securities and Exchange Commission and any other governmental agencies involved, the new pipe line company will be financed by institutional loans and a public offering of its securities.

John R. McMillan, former executive vice president of Monterey Oil Company, heads the new pipe line company as president. Donlin P. Murdy, former vice president of Monterey Oil, has been named vice president and treasurer of the new company. The directors will be Messrs. McMillan and Murdy, H. W. Haight, executive vice president and director of Humble, and Nelson Jones, director of Humble; and Frederick L. Ehrman, partner of Lehman Brothers and former chairman of Monterey Oil Company. Martin Erck, formerly general counsel and secretary of Monterey Oil Company, is associate general counsel and secretary.

Under the present plans, the new pipe line company will ultimately transport more than 700 million cubic feet of gas a day from Southwest Texas to Alexandria, La., for sale to United Fuel Gas Company, principal supplier of gas to other Columbia Gas System Companies.

The Columbia Gulf Transmission Company, a subsidiary of Columbia Gas, will transport the gas from Alexandria to Columbia's consuming area.

Under a letter of intent signed by Humble and Monterey Gas Transmission Company, the latter proposes:

Conferees present for signing of agreements were, left to right, standing: F. H. Crissman (Columbia), Lyon Terry (Lehman), Charles G. Daley (consulting rate engineer), Edward S. Pinney (Columbia), Carl Illig (Humble), O. L. Luper (Humble), R. F. Duemler (Columbia), F. W. Batten (Columbia), Lester R. Moore (Humble), Martin Erck (Monterey), B. A. Foster (consulting attorney), Lamar Stone (Humble); seated: E. O. Bottler (Columbia Gulf), H. W. Haight (Humble), G. S. Young (Columbia), John W. Partridge (United Fuel Gas), J. R. McMillan (Monterey), C. E. Loomis (Columbia), W. J. Greenwald (Humble), D. P. Murdy (Monterey).

S TRANSMISSION COMPANY

(1) To purchase Humble's present 30-inch, 238-mile-long gas transmission line which extends from Humble's King Ranch Gas Plant in Southwest Texas to its Clear Lake Gas Plant, near Houston.

(2) To construct a new 30-inch, 216-mile-long transmission line from Clear Lake to Alexandria, where it will tie in with the line of Columbia Gulf.

(3) To purchase from Humble, by an assignment of leases, gas reserves in-place in the amount of 3.5 trillion cubic feet, and, later, to purchase additional in-place reserves from Humble in the amount of 2.7 trillion cubic feet.

Under a letter of intent signed by Monterey Gas and United Fuel, the new pipe line company will sell gas from these reserves pursuant to long term contract.

Deliveries under that contract will run until 1986 or later and will be on a cost of service basis under which the field cost of gas is fixed for the term of the contract on the basis of Monterey Gas Transmission Company's investment in purchasing the reserves.

These deliveries will ultimately be distributed by Columbia Gas System Companies, and non-affiliated companies served at wholesale, to customers in the area served by them in Ohio, Pennsylvania, West Virginia, Virginia, Kentucky, New York, Maryland, and the District of Columbia.

George S. Young, chairman of the Columbia Gas System, Inc., said that the agreement signed has great significance.

"For Columbia," he said, "it represents an important addition to the System's supplies. For the economy of the territory we serve, perhaps the greatest benefit lies in the fact that this gas will be acquired at a relatively firm price over a long term and will tend to level off the upward trend of prices which we have been experiencing."

Monterey Gas Transmission Company will apply as soon as possible to the Federal Power Commission for the necessary certificates of public convenience and necessity. In addition, various financial details need to be worked out.

Deliveries from Monterey to Columbia Gas System are scheduled to start late in 1962.

TANKER

Esso Gettysburg, in service since 1957, typifies the big, fast, efficient supertankers of energy-carrying Esso fleet. The 23 vessels now operating under the Marine Division of the Humble Company comprise the largest privately owned tanker fleet sailing under the U. S. flag.

Humble's Esso Fleet moves 400,000 barrels of crude oil and oil products daily between U.S. ports on the Gulf of Mexico and the Atlantic seaboard

MORE than half of all the crude oil produced in the U. S. comes from wells in the five states bordering on the Gulf of Mexico; here, also, is located nearly one-third of the nation's refining capacity.

More than 35 per cent of the gasoline and almost 60 per cent of the nation's heating oil and fuel oil are consumed in the 16 states along the eastern seaboard.

What these two facts bring into sharp focus is that here is a transportation problem of major proportions, a problem which the industry has solved over the years by using two major transportation methods: pipe lines to gather crude oil from scattered fields and deliver it to coastal refineries and to crude oil storage terminals at Gulf ports; economical water transportation for the big coastwise movement to ports on the Atlantic seaboard.

Humble handles shipment of large quantities of petroleum energy materials from producing wells to market in just this manner. A fleet of 23 tankers—largest privately owned tanker fleet under the U. S. flag—shuttles between Gulf and Atlantic ports the year around, moving about 400,000 barrels, or more than 16 million gallons, of crude oil and refined products daily. Under the direction of the Marine Division of Humble Oil & Refining Company, this fleet literally serves as

LIFELINE

a lifeline between the producing fields in the Gulf Coast states and the heavily populated consuming centers along the Atlantic seaboard.

Ships of the fleet range in size from the comparatively small *Esso Greenville* to the two newest supertankers commissioned in 1960, the *Esso Baltimore* and the *Esso Boston*. Each of the latter can carry 417,000 barrels. The *Esso Greenville* and five ships of similar size have capacities ranging from 135,750 to 138,000 barrels each. In between these extremes are two other classes: 12 ships of the *Esso New York* class which carry 225,000 barrels; and four supertankers of the *Esso Gettysburg* class which haul 311,000 barrels at high speeds.

Because about two-thirds of the Humble Company's 950,000 barrels-a-day refining capacity is concentrated in the nation's two largest refineries at Baton Rouge, Louisiana, and Baytown, Texas, the fleet transports large quantities of refined products from these two plants to eastern markets. By the same token, Gulf Coast ports are within easy distance of oil fields where Humble has more than 80 per cent of its current production and reserves, making the tanker fleet a vital link also in supplying crude oil to the Company's East Coast refineries.

Clean and *dirty* are terms tankermen use to distinguish cargoes carried by tankers. A ship carrying gasoline, kerosene, jet fuel, diesel oil, heating oil, and a number of other refined products is in clean service; one which carries crude oil or heavy fuel oil is in dirty service. Seventeen ships in the Esso fleet are in clean service; six in dirty. At times a ship will be changed from dirty to clean service by washing the tanks with especially provided equipment. This is common during the fall and winter months when more carrying capacity is needed for heating oil. Most vessels can carry either clean or dirty cargoes as demand requires.

Serpentine hoses throb as cargo of crude oil is pumped aboard the *Esso Baltimore* at Baytown Refinery. This 740-foot supertanker, launched last year, will float more than 417,000 barrels of oil. Vessel slowly settles into water during 12-hour loading period.

Tankermen check level of crude oil on expansive deck of *Esso Baltimore* after loading at Baytown. Ship's 35 tanks may transport any number of other petroleum products—gasoline, jet fuel, heating oil; smaller tankers carry petrochemicals such as solvents and alcohols.

"As demand requires" covers a multitude of conditions: the driving habits of motorists, the pace of industrial activity, the idiosyncracies of the weather, and the normal difference in summer and winter demand for types of products. A long, sunny week-end holiday that tempts Eastern car owners out onto the highways can make enormous inroads on supplies of gasoline in storage; severe cold weather in the heavily populated East can threaten to deplete normal stocks of heating oil.

Brain center for keeping a close check on these and other variable conditions which affect supply and demand is in Humble's Supply Division in Houston. Here staff men keep a careful watch on inventories of crude oil and refined products at all major terminals. Here also are mapped over-all plans for employing the ships of the fleet at maximum efficiency, and for having ready at terminals and refineries the various grades of products and crude oils needed to meet requirements.

Crew accommodations on tankers of Esso fleet are clean and comfortable. This recreation room on *Esso Baltimore,* for example, has television, easy chairs, games, reading matter.

For a quick look at how this group adjusts plans and works with the fleet, let's review activities during the month of March 1960 when a late wintry blast laid a mantle of ice and snow over New England and other eastern states:

On March 8, the *Esso Annapolis* was discharging heating oil at New Haven, Connecticut, when news of very high demand and a potential shortage came from Sewell's Point (Norfolk, Virginia). The ship was instructed to keep 33,500 barrels aboard and hurry to that port.

One week later the *Esso Newark* was given A-1 priority over other ships in port at Baytown, Texas, so she could be loaded with heating oil and several other grades of products and dispatched to further supply the exceptionally high demand at Sewell's Point.

Three other ships, *Esso New York, Esso Lima,* and *Esso Gloucester,* which had been in dirty service, worked diligently on ballast trips south to clean their cargo tanks. Successful completion of this big task meant they were able to deliver to East Coast terminals gasoline, heating oil, and other refined products that met all quality requirements. That in turn meant that immediate deliveries of these products could

be made to customers to avoid threatened shortage.

On March 21, because of these diversions from dirty to clean service, Everett Refinery near Boston was running acutely low on crude oil stocks; at the same time winter's grip was lowering the level of heating oil in customers' tanks in Boston. The Supply Division, then in New York, requested Marine for help in getting an early crude shipment to Everett Refinery, so *Esso Lexington* increased her speed at sea to make the tide at Boston and replenish the plant's crude stocks ahead of schedule. One week later the *Esso Washington* repeated the performance, and the customers were kept warm.

By the time the cold spell subsided, the fleet's normal schedule was well scrambled, but customers up and down the East Coast had been supplied without a hitch.

After an emergency like this it is generally true that the Marine Division needs from two to three weeks to re-establish normal schedules and get all of the ships back on regular assignments. For the men at sea it means problems, but meeting emergencies and adjusting to changes in schedules and cargoes are not unexpected. The tankermen have a deep pride in the efficiency of the fleet.

Among the more than 1,800 seagoing and 251 shore based employees, 314 have more than 20 years of service. They pridefully hearken back to service during World War II days, when emergencies on the high seas were not uncommon and changed orders, revised cargoes, and altered destinations occurred frequently.

Aboard Esso Baltimore, youngsters listen enthalled as Captain Harold Griffiths describes life at sea. About 33,000 persons visited the new tanker at Baltimore, Bayway, Baytown.

Captain Harold Griffiths, master of the *Esso Baltimore,* for instance, has some 35 years' service at sea. Starting as an able bodied seaman in the middle 20s, he advanced to chief mate by 1930, and sailed as master for the first time aboard the *W. L. Steed* in 1934. The *Esso Baltimore* is the 20th ship on which he has sailed as master. Many of his fellow officers are career seagoing men, as is true of a substantial number of the unlicensed personnel.

"Most of them," Captain Griffiths says, "remember when the ships under the U. S. flag were part of Esso Shipping Company's world-wide fleet and their voyages took them to many of the famous ports of the world." In July, 1958, however, the U. S. flag tankers were separated from the remainder of that fleet and were organized as the Marine Department of Esso Standard Oil Company. A year later the domestic Inland Waterways group became a part of the Marine Department. In December, 1960, the tanker fleet and the Inland Waterways organization were set up as the Marine Division of Humble. The Division office is now located in Houston.

The 23 active ships of the fleet now sail principally between Gulf and Atlantic ports, carrying cargo from the Southwest to the East Coast and returning in ballast more than 90 per cent of the time.

Esso Boston, pictured on trial trip, was one of two streamlined supertankers to join Humble's Esso fleet in 1960. Like the *Baltimore,* ship is taller than a five-story building and two city blocks long; can carry enough gasoline to fuel 890,000 automobiles.

The bulk of the northbound clean cargoes are gasoline, kerosine, heating oils and Diesel fuels, but more and more volume and variety is developing in petrochemicals. Three vessels in particular, the *Esso Bangor, Esso Huntington,* and *Esso Lima,* have been converted to carry petroleum specialties. The first two have dehumidifying systems to prevent contamination of cargoes sensitive to moisture, especially lubricating oils and alcohols. They also have segregated tanks, pipelines and pumps for handling "critical" cargoes of solvents, alcohols, lube oils, and waxes. On one round trip the *Esso Huntington* carried 31 grades of products.

By the end of this year, more than two-thirds of the vessels in the fleet will have facilities to handle one or more parcels of petrochemicals.

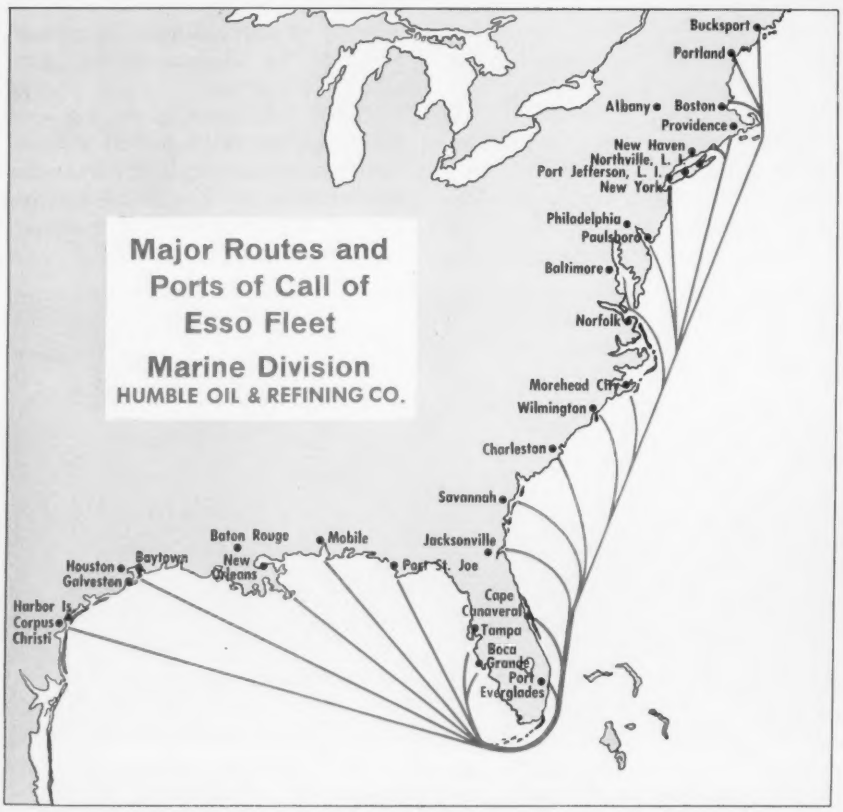
Under normal weather conditions the trip from Baytown, Harbor Island, near Corpus Christi, or Baton Rouge to New York takes five days. In port, the order of the day is a fast "turnaround." This means that loading or unloading is accomplished in a minimum of time—anywhere from 12 to 18 hours.

For example, the giant new *Esso Baltimore* recently loaded 319,000 barrels of crude oil at Baytown (on the Houston Ship Channel) in 12 hours. At Bayway, New Jersey, the huge pumps aboard the ship disgorged cargo and took on ballast in a matter of nine to ten hours.

Because fast turnarounds allow little time for shore leave, the Company some years ago worked out an agreement with groups representing seagoing personnel for a liberal time-off program for all members of the fleet. Both officers and unlicensed personnel are on duty for 80 days and then enjoy a paid shore leave of 40 days.

The tankermen, of course, look forward eagerly to their extended shore leaves and time with their families. Yet, being true sailing men they never lose their yearning to be at sea, playing their parts in delivering vital cargoes of crude oil and products to oil-hungry markets.

A future article will bring to these pages the story of another segment of the Marine Division—the Inland Waterways Department. This will be the story of some 300 employees who manage tugs and barges up rivers and canals and in major U. S. ports to deliver petroleum products.



Wheelhouse of *Esso Baltimore* is fitted with most modern aids to safe handling of ship.

Husky seamen, part of the *Esso Baltimore's* crew of 52, manhandle big mooring cable.

Hosing down ship, crewman looks forward to 40 days shore leave after 80 days at sea.

Good Samaritans Of The Sea

LIKE all seafaring men, tankermen of Humble's Esso fleet are schooled to handle emergencies and to help those in distress.

Only a few weeks ago, the officers and crew of the *Esso Raleigh* had occasion to put their training to good use when they answered an SOS from a stricken freighter off the Atlantic coast about 50 miles southeast of Portland, Maine.

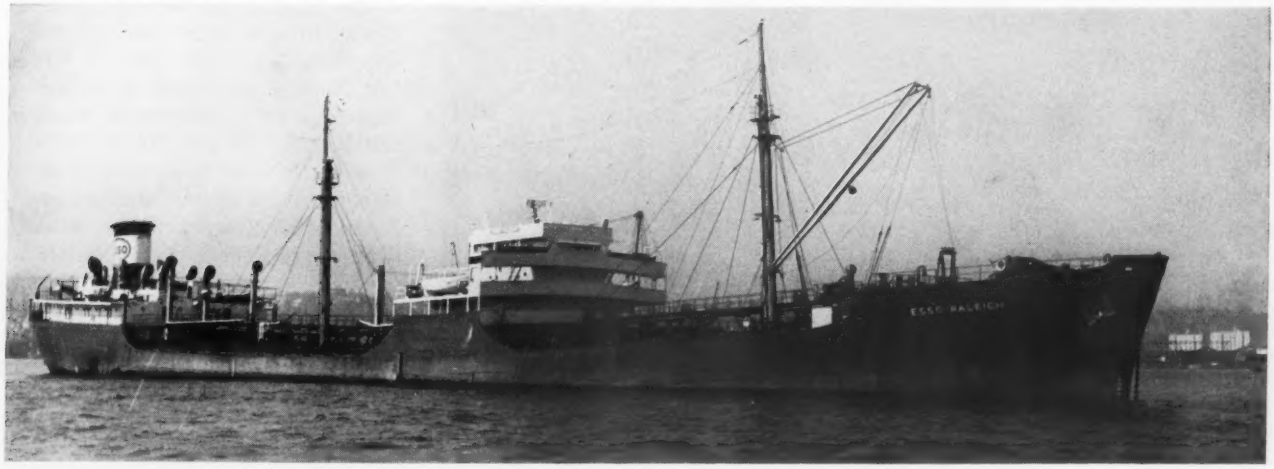
The freighter was the *Marine Merchant,* a converted Liberty ship loaded with 8,000 tons of sulphur destined for Portland. The ship had run into trouble in heavy seas lashed by a strong northeast gale, and had dropped anchor to ride out the storm. A few hours later, however, the freighter's back was broken and the crew was ordered to abandon ship. Twenty-six men in one of the lifeboats rowed to the *Esso Raleigh,* which had dashed 70 miles to reach the scene, and were taken safely aboard the tanker. Nine survivors in another lifeboat were picked up by the British cargo ship *Daru.*

Not all of the tankermen's rescue missions are carried out under such dramatic conditions, but seldom does a month pass without one or more Esso ships playing the Good Samaritan role at sea. During one ten-day period last summer, for example, the following incidents were logged by ships of Humble's Esso tanker fleet:

- The *Esso Patterson* saw a distress signal from a small cabin cruiser which had run out of fuel with two men aboard. The tanker stood by until a Coast Guard craft took the crippled cruiser in tow.
- The *Esso Gettysburg* sighted a small fishing boat which was lost on a trip from Havana to Miami. The tanker gave sailing directions and notified the Coast Guard.
- The *Esso Gloucester* changed course at Coast Guard request and stood by off Cape Canaveral, Florida, until all personnel from a downed military tanker plane had been accounted for.
- The *Esso New York* rescued four fishermen who had been adrift off the coast of Florida for two and a half days.

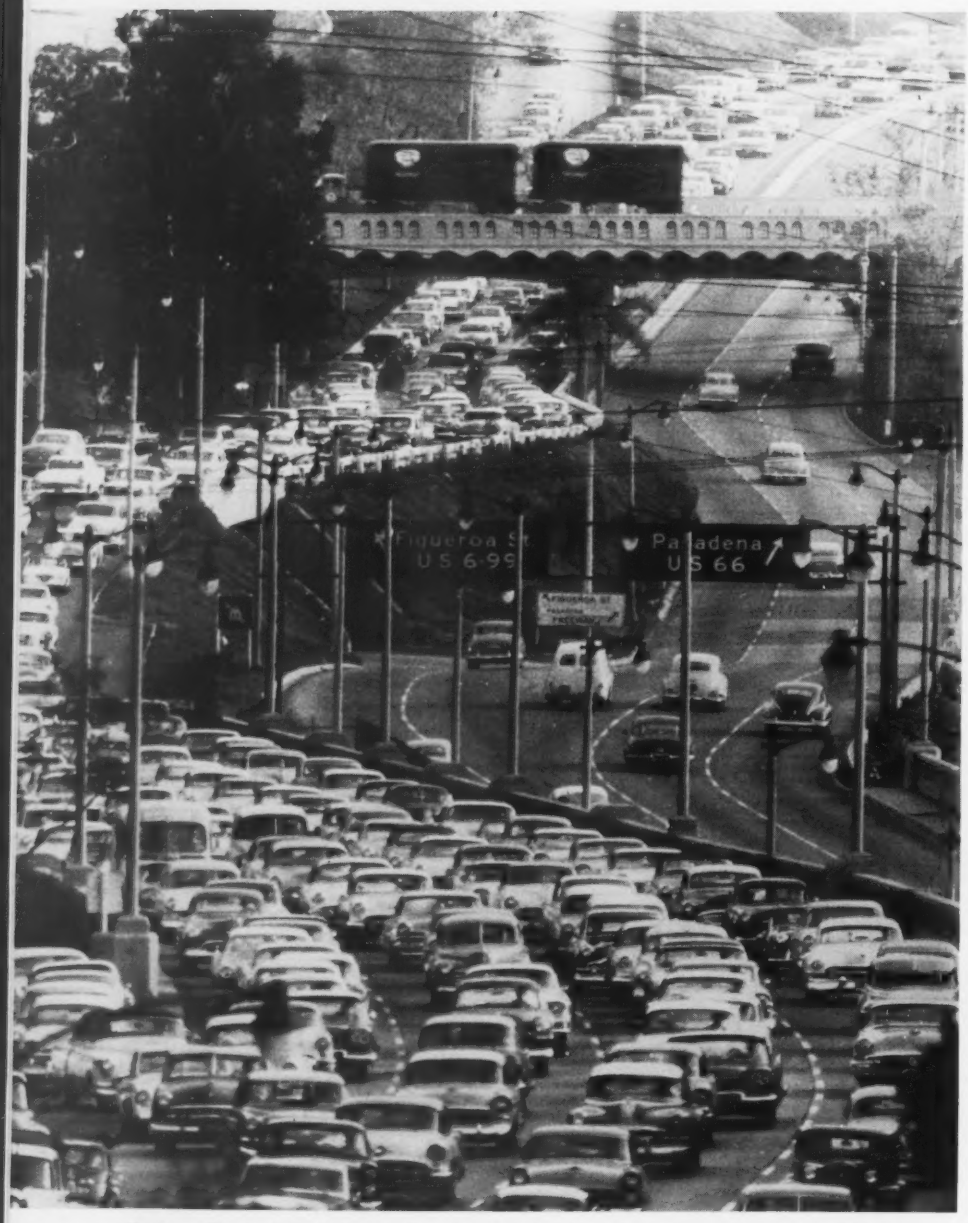
Stricken freighter carrying sulphur and 35-man crew, *Marine Merchant* wallows helplessly in angry seas off Maine coast April 14.

Rescued Skipper, left, Captain Robert P. Ruse of *Marine Merchant,* expresses gratitude to Esso Captain Leslie H. Winder after he and 25 other survivors were picked up by *Esso Raleigh,* below. Tanker, headed for Boston, sped to scene before freighter broke and sank.



California

With new residents pouring in at the rate of a thousand a day, the Golden State is shattering all growth records



Peak traffic periods find even Los Angeles' intricate freeway system filled with automobiles. More than 3½ million motor vehicles are registered in two-county metropolitan area.

CALIFORNIA is growing with the speed of a rocket headed for outer space.

Newcomers are flooding into the state in such prodigious numbers that even the old-timers find themselves blinking in amazement. And Californians are not easily impressed by growth; they have long been accustomed to seeing their state double its population every twenty years.

As a result of this mounting tide of westward migration, California now ranks second only to New York State in total population. The Golden State currently counts its residents at better than 15,500,000. That's about five and a half million more people than were there only 13 years ago, when Humble opened its first West Coast exploration office in Los Angeles.

Well over half of the approximately 1,000 newcomers who arrive in California on an average day are headed for Los Angeles. This sprawling metropolis, once described by J. B. Priestley as "six suburbs is search of a city," has burgeoned into a complex community of more than 6,700,000 people—the second largest population center in the nation, and the fastest growing.

The tidal wave of eager new residents has long since overflowed the city itself, and is rapidly filling up all of Los Angeles and Orange counties. The six suburbs mentioned by Priestley have been joined by scores of others. Los Angeles' metropolitan area now encompasses 72 incorporated towns in Los Angeles County, 21 in Orange County, and countless unincorporated communities throughout the two-county area. Everywhere new housing units are springing up as rapidly as workmen can build them, and new residents are moving in as fast as the houses are completed.

In the City of Los Angeles alone the number of residents has increased by more than half a million during the past ten years. As a result of this

...here they come

tremendous influx, the city is beginning to grow vertically as well as laterally. In the downtown area, towering skyscrapers are replacing smaller buildings. Tall apartment buildings are going up on lots formerly occupied by one-story houses. The city's central business area is finally taking on the big-city appearance in keeping with its intricate system of freeways.

But the surrounding suburban cities have also shared in Los Angeles' phenomenal growth. Take Anaheim, for example. That's the site of Walt Disney's world-famous Disneyland, and is also the location of Humble's first bulk station in California.

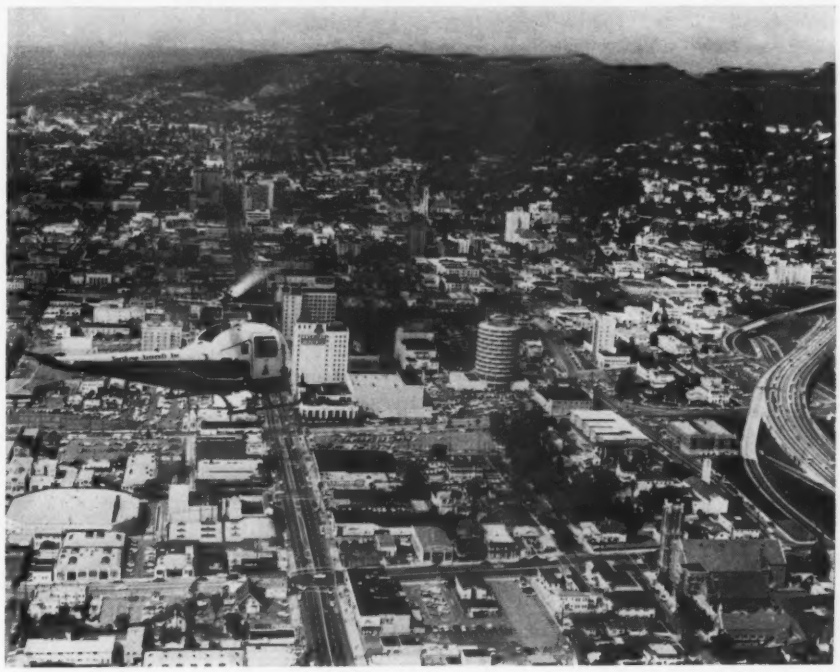
In 1950, Anaheim was a prosperous little city of 14,556 people some 30 miles south of downtown Los Angeles. Today, it has a population of more than 103,000. That's a net gain of better than 610 per cent in a decade.

Similar examples of growth can be found all over the area. In 1940, the San Fernando Valley, which lies between two rows of mountains and extends some 30 miles north of the Los Angeles city hall, was mostly a land of orchards. Today, the trees have been pushed back to make room for 22 major communities with more than 811,000 residents.

What is the magical lure of Southern California? Why do thousands of people in other parts of the country decide each year to pull up stakes, pack their belongings, and move to Los Angeles? There are many reasons, of course, but almost every newcomer will tell you that the climate had a lot to do with bringing him to the West Coast.

And what a climate it is! Imagine a place where the sun shines 73 per cent of all the time possible; where the annual rainfall amounts to only 14.5 inches and there are 328 days with no rain at all; where the average mean temperature is 64 degrees, with virtually no extremes of heat or cold; and where the mid-day humidity is usually well under 50 per cent. That place is Los Angeles in any normal

Pershing Square, familiar landmark in heart of Los Angeles' central business area, is a peaceful park serving two purposes; below it is a multi-level underground parking garage.



Motion picture capital of the world is Hollywood, seen here from the air. Sunny climate of Southern California attracted early movie makers, still attracts industries to area.

Complex interchanges such as this one in Los Angeles help smooth the heavy flow of traffic over California's extensive freeway system. With seven million automobiles registered in the state, gasoline consumption this year will be approximately 5.9 billion gallons.

year, according to the records of the downtown station of the U. S. Weather Bureau.

There is one flaw in this picture of perfection, however, and that is the much publicized smog. Los Angeles residents readily admit that smog is a problem, but they also say that it is not as bad as most people seem to think. Less than a fourth of the metropolitan area of 5,000 square miles is bothered by smog, they tell you, and there are only about 80 days in the average year when even that area is affected.

With or without smog, it takes more than sunshine and dry air to support a population of six million people. Fortunately for the economy of Southern California, industrial growth has kept pace with the explosion of population. Whether the industries attract the people or the people attract the industries is debatable, but the net result is the same. The Los Angeles metropolitan area is now the leading manufacturing center west of the Mississippi and the third largest in the United States.

Perhaps the most remarkable aspect of this industrial development is its diversity. The aircraft industry, with an average employment roll of 175,000 production workers, still leads the field; but there are at least 14 other types of industries large enough to employ more than 15,000 workers.

One of these is the rapidly growing electronics industry. In Los Angeles today there are 500 plants and more than 115,000 employees engaged in the manufacture of electronic equipment.

Among the 30 or more different industries in which Los Angeles ranks third or better in the nation, several are related to the automotive industry. It is interesting to note, for example, that only Detroit assembles more automobiles than does Los Angeles, and only Akron manufactures more automobile tires.

This emphasis on transportation equipment is a logical development because Californians are the most mobile people in the world. They own some seven million automobiles and burn about 15,600,000 gallons of gasoline daily.

As might be expected, the heaviest concentration of these vehicles is found in the Los Angeles area, where the records show there is one automobile for every 2.2 people. More than 3,500,000 motor vehicles are registered in the two-county metropolitan area, and to the average visitor, they all seem to be on the streets at the same time. Even the famous Los Angeles freeway system becomes jammed with vehicles during peak traffic periods.

But if Los Angeles' multitudinous motor vehicles have brought traffic problems to the city, they have also brought it the distinction of being the nation's top-ranking and fastest growing gasoline market. That fact has not escaped the attention of numerous oil companies, Humble included.

Seeking to gain a foothold in this prime market area, Humble last year

acquired a bulk station and a number of service station outlets in Orange County. Thirty-seven of these outlets have been converted into Humble stations and are now serving customers under the ENCO sign.

"We're starting from scratch in one of the most competitive markets in the country," says H. W. McKim, manager of Humble's new Los Angeles marketing district, "but we came to stay, and that means we are going to grow."

Humble plans to develop marketing representation generally in the Los Angeles and San Francisco areas of the state at this time. Starting with a nucleus of existing stations, the Company plans to develop additional locations until these areas are adequately covered.

But Humble's interest in the Golden State is not confined to marketing alone. The Company has carried on an active program of exploration and production in California since 1948 and within recent months has bolstered its holdings through purchase of producing properties of Monterey Oil Company.

For the time being, the old Humble operations in California continue to function under the California Area Office in Los Angeles, where N. N. Jones is acting area manager. The Monterey operations are organized under the new Monterey Division, of which A. W. Gentry is president. The Monterey Division office is also in Los Angeles, but its operations in the California area are administered out of another office in Long Beach, with Marshall C. Turner as area manager.

Exclusive of the Monterey properties, Humble's crude oil production in 12 Southern California oil fields amounts to a little more than 8,700 barrels a day from 152 Humble-operated wells, plus almost 2,600 barrels from 35 wells operated by others.

Approximately half of the Humble-operated production comes from the Castaic Junction Field, near the eastern end of the Ventura Basin north of Los Angeles. Humble discovered this field in 1950 and now has 56 wells in production. Gas is being injected into three zones under different pressures as part of a long-range pressure maintenance program in the field.

Another interesting operation is the current development of an offshore field near Summerland, east of Santa Barbara. Humble owns a half interest in the project along with Standard of California. Standard's Western Operations, Inc. is the operator. Two offshore platforms have been built to develop this field and additional wells are being drilled from both. Since 1958, 16 producing oil wells and one gas well have been completed from the two platforms, and the limits of the field have not yet been determined.

In addition to crude oil production, Humble's operations include about 61 million cubic feet of gas production daily from 11 gas fields located in the Sacramento Valley of Northern California. About half of this gas comes from 14 Humble-operated wells.

The new Monterey Division adds significantly to Humble's total producing properties in California. Monterey's crude oil production in 24 Southern California oil fields amounts to some 9,900 barrels a day from 428 Monterey-operated wells; plus more than 3,046 barrels a day from 473 wells operated by others.

The most productive, and probably the most interesting of Monterey's holdings is the Belmont offshore field, developed by Monterey and Texaco,

Aircraft manufacturing is one of several types of industries in which Los Angeles leads the nation. As industrial center, this metropolitan area ranks third in the United States.

Artificial island, built up from ocean floor off Seal Beach by Monterey Oil and Texaco, Inc., is site of 40 producing wells, now operated by Monterey Division of Humble Company.

Platform Hilda, jointly owned by Humble and Standard of California, is second erected to develop offshore oil field near Summerland. Western Operations, Inc., is the operator.

Inc. from an artificial island built up from the ocean floor a mile and a half from Seal Beach. The discovery well was drilled from shore in 1948, and had to be slanted as much as 80 degrees from vertical in order to tap the productive zone 9,271 feet seaward from the surface location. After the discovery, Monterey-Texaco constructed the unique artificial island in 45 feet of water to provide a site for additional wells. The island was originally designed to accommodate three drilling sites, but has since been modified to make room for a total of 70 wells. Currently, Monterey is operating 40 producing wells from the island, with a daily average production of 3,594 barrels of oil.

In addition to crude oil, the Monterey Division has gas production from two gas fields in the Sacramento Valley. Ten Monterey-operated wells in the Rio Vista Field produce about 8,628,000 cubic feet of gas daily; another 157,000 cubic feet come from three wells operated by others in the Sycamore Slough gas field.

Even with the addition of the Monterey properties, however, Humble's total production of crude oil in California is only a small percentage of the state's total production of about 834,000 barrels. And the entire state does not produce as much oil or gas as it consumes. Humble continues to carry on extensive exploration activities in the West Coast area in a ceaseless effort to find new reserves.

This Humble service station in Los Angeles metropolitan area is one of several Southern California outlets which Company has converted to sell Enco products under Enco oval.

Although Humble is just starting to market automotive products in California, the Company's petrochemicals marketing division, Enjay Chemical Company, has been active on the West Coast since 1955. Enjay now has a district sales office in Los Angeles, with deep sea terminal facilities at San Pedro and warehouse facilities in Los Angeles, San Pedro, Oakland, and Portland.

Frank Floren, Enjay's district manager, speaks with typical California enthusiasm of the growing importance of petrochemicals in the West Coast industrial community. "We're working with hundreds of manufacturers in a wide variety of industries," he says, "and finding scores of interesting new uses for plastics, elastomers, and all the other types of petrochemical products." Among the important users of Enjay's petrochemicals in the Los Angeles area are the rubber products manufacturers, the manufacturers of paints and protective coatings, the paper and fiberboard industries, the aircraft and automotive industries, and many others.

What lies ahead for Los Angeles and the rest of Southern California? Can the area continue to grow at this rapid pace? The Southern California Research Council foresees that it can and will. The Council predicts that some day all the available land area in the southern portion of California will become one huge "Southern California Metropolis," the largest in the world. By 1970, the Council believes Southern California will have 13,000,000 residents, and the total will increase to 16,700,000 by 1980. The trend toward industrialization will continue at an accelerated pace during the next two decades, it predicts, and by 1980, manufacturing industries in the area will provide employment for over 2 million persons.

There will be problems connected with this continuing explosion of population, but Californians will find ways to solve them. Apparently, Southern California is going to be a bright spot in the nation's pattern of progress for many years to come. Humble expects to be a part of that progress.

View from 20th floor of Humble skyscraper looks north toward Houston's central business district past workmen fitting precast concrete panels to outside walls. Part of the old Humble building, two blocks away, is visible at lower left of center, behind bank building.

HUMBLE'S NEW HOME

44-story building will bring Houston office personnel together in one modern, efficient business residence

A MODERN skyscraper, like a human being, has an anatomy all its own. First its concrete feet are planted. Next the steel skeleton is erected. On this framework, a skin of stone, metal, and glass begins to take shape. The giant's innards, meanwhile, are being laced with miles of pipe, wiring, and duct work.

This personification represents a reasonably up-to-date, if somewhat sketchy, report of construction progress on the new Humble headquarters building in downtown Houston. Its 44 floors support a multi-level beehive of building activity. Six hundred skilled workmen from more than a dozen different trades—ironworkers, carpenters, cement finishers, electricians, plumbers, masons—move briskly about their specialized tasks.

At the lower and middle floors, craftsmen are placing pre-cast panels of concrete and Texas dolomite on the building facade; and fitting plates of Vermont marble on the outside main columns. Higher up, bolting crews and welders are installing outriggers for sun shades to be affixed later. Concrete floor-filling and fireproofing proceeds in the upper stories. Heard everywhere are the sound effects of progress—the noisy efficiency of men and machinery at work.

This spring, the new Humble building and garage reached the approximate mid-way mark of completion. Target date for the beginning of occupancy is mid-1962—roughly 900 days after the first ceremonial spadeful of earth was turned. When the day arrives, employees in the old headquarters building will pack their office effects and bid farewell to the structure which, with its several additions, has served the Humble Company for four decades.

With the dedication ceremonies, Humble Oil & Refining Company will open a distinctive new business residence for its manifold, nationwide operations. Home office activities will be consolidated in one modern, efficient building. Up to 7,000 Humble

Towering 606 dizzy feet above sidewalks, new Humble building is tallest structure on Houston skyline by more than 100 feet. Quill-like outriggers will support metal sun shades.

employees and tenants will occupy about one million square feet of floor space—enough to provide growing room for the Company for many years and, in the meantime, highly attractive leases for outside tenants. Estimated cost of the project: about $32 million.

The new Humble building will cast a long shadow around the Southwest and the nation. It rises 606 feet above Houston's busy sidewalks, more than 100 feet higher than any other building on the skyline. For the present, it is the tallest skyscraper west of the Mississippi River. Only two cities in the world—New York and Cleveland —have taller.

Architecturally, the building-to-be is a simple rectangular tower, about 225 feet long by 115 feet wide, facing north toward Houston's business district. When completed, it will stand as a gleaming white shaft on a block square base set three and one-half feet above ground level. A handsome, landscaped plaza will be created in the spacious area not covered by the building tower. Reflecting pools and fountains will add to the park-like atmosphere.

The main lobby, highlighted by glass walls two stories high and dazzling marble and bronze interior, will provide a dramatic entrance to the new building. Located on the concourse level beneath the lobby and plaza will be a cafeteria seating 1,000 persons, a 500-seat auditorium, lounges, and space for several shops. Escalators will connect the concourse level to the lobby with its Humble Touring Service and an exhibition area.

Vertical transportation in the tower will be supplied by 28 passenger elevators—high-speed and operated automatically. Express cars will whisk passengers past three mechanical floors (at the 9th, 21st, and 33rd floors) to the striking two-story building "crown," sheathed in glass.

Atop the crown, a glass-enclosed observation area will offer employees and visitors a breath-taking view of the city and the surrounding Gulf Coastal plain. Microwave equipment for Company communications will also be placed at the summit.

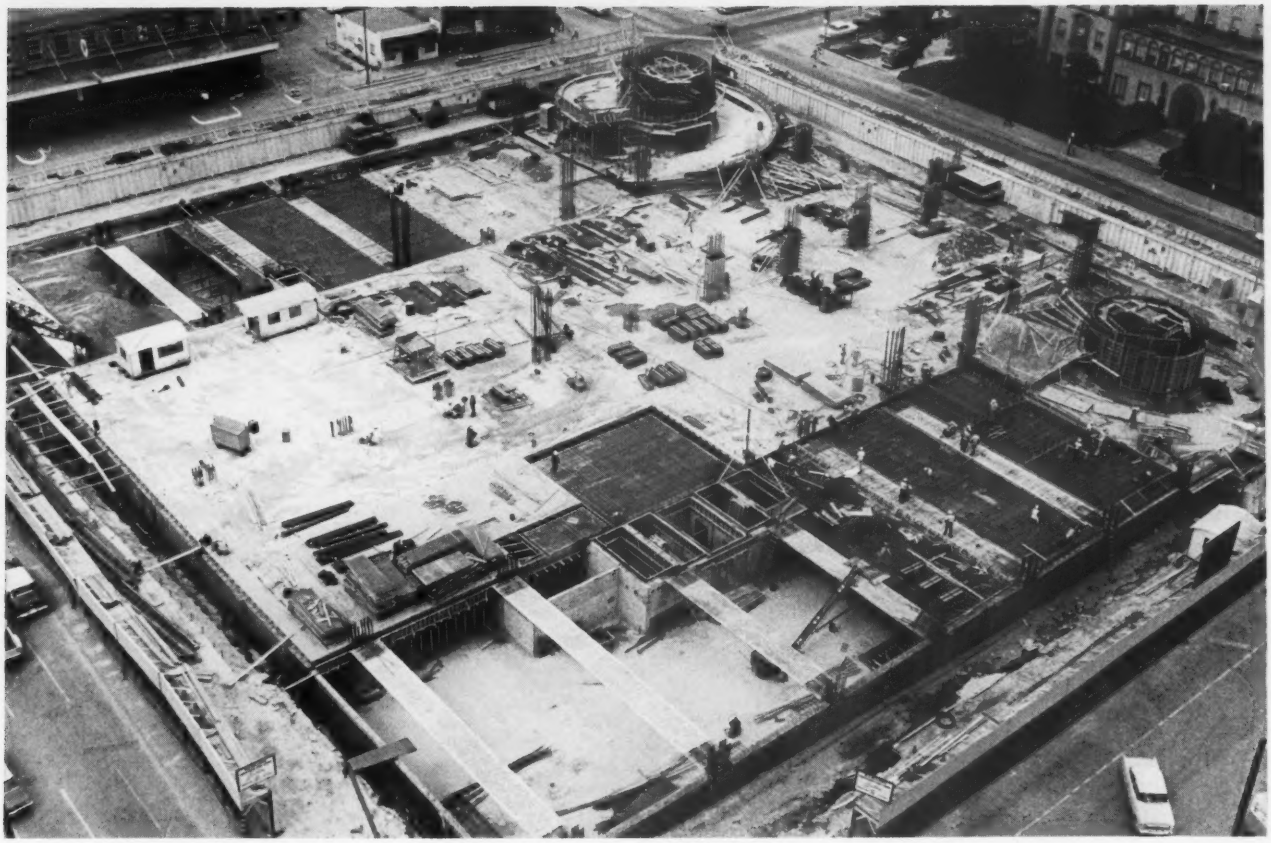
To prevent traffic congestion around the new building, an inclined ramp system has been designed at the south side. Trucks will be routed down these ramps to the concourse level loading docks and nearby freight elevators. Two basements below the concourse level will house a printing and reproduction plant, maintenance shops, and storage area.

From the concourse level, an underground passageway leads to the adjoining block where the six-story parking garage, capable of handling 1,200 automobiles, is located. The garage roof will support the mechanical plant for the main building, including boilers, air conditioning compressors, and cooling towers.

Situating these facilities here frees the tower from objectional noise and vibration without sacrificing efficiency and year-round comfort. The garage ground floor will shelter a completely-equipped Humble service station and, in leased space, the Fidelity Bank and Trust Company and its drive-in facilities.

Garage construction is coming along rapidly. The foundation has been poured. Basements and spiral rampways are partially complete. Prestressed concrete T-beams—over 60 feet long and requiring a police escort to move to the site through city traffic—are being set at ground level. Garage completion is scheduled several weeks before the main building. Reason: the tower will draw its breath, both hot and cold, from across the street.

One matter that interests Houston-based Humble employees as keenly as completion dates is the location of their offices. Space allocation is un-



Garage construction on block adjacent to Humble tower moves ahead rapidly. A six-story structure, it will shelter 1,200 cars at a time and shoulder most of the mechanical equipment for the main building. Underground passageway connects garage with tower.

developed at this time, but certain general divisions seem likely. Humble's Southwest Region will probably occupy the lower half of the new building. The upper half will be divided between outside tenants and Humble's headquarters organization. Top management offices are planned to begin on the 42nd floor (beneath the Houston Petroleum Club on the two top stories) and work downward. In all, about 15 floors will be leased to long-term tenants.

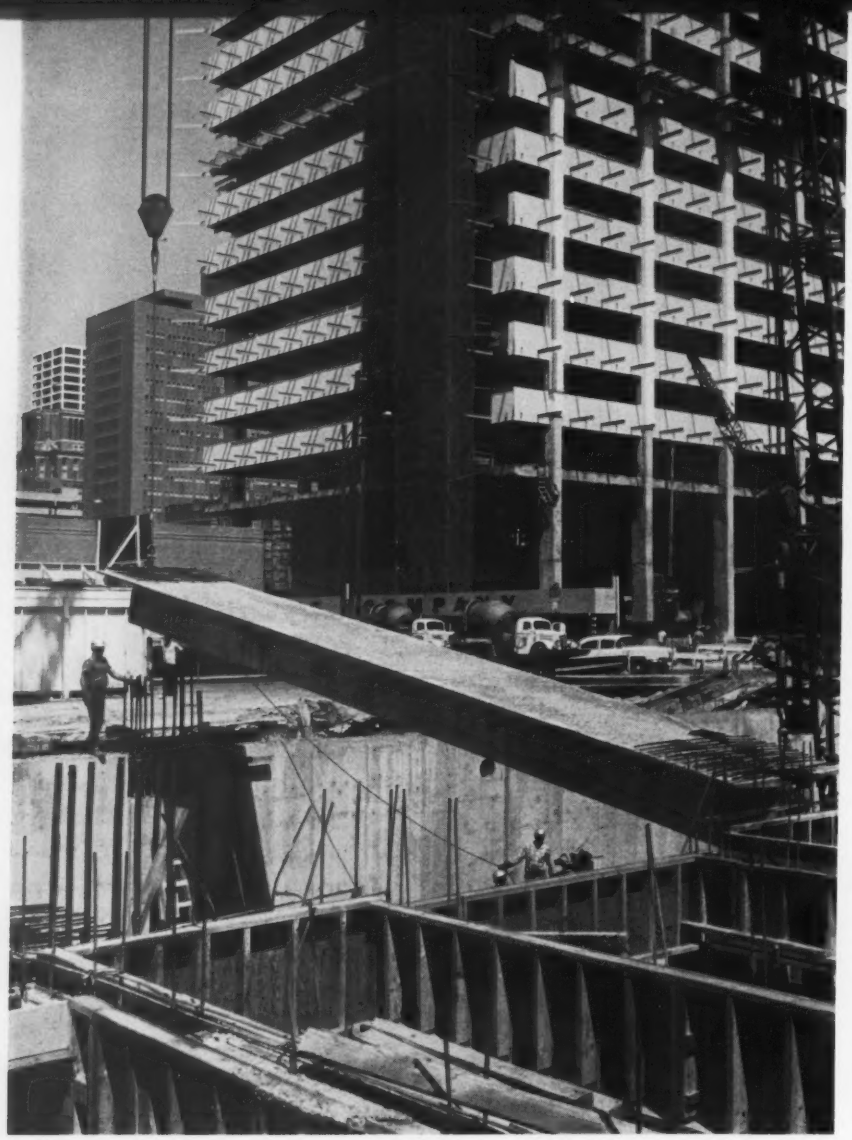
Humble's new headquarters building will incorporate the latest advances in structural methods, lighting, and air conditioning. Offices will be shielded from the bright Texas sun, for example, by 14,000 horizontal sun shades. Made of porcelain-enameled aluminum, these solar shades will greatly reduce heat and glare, saving on air conditioning costs. As the sun moves across the sky, they will create a constantly changing pattern of light on the building's four faces.

Inside the building, office space will be extremely flexible thanks to a new "module" system of architectural design. Each module or grid (four feet, eight inches square) is a self-sufficient unit with its own communications and power outlets, lighting fixtures, air conditioning and heating, and sound control.

These independent modules will permit workmen to enlarge or divide floor space quickly and economically with specially-designed movable metal wall partitions. Overnight, for example, they might increase a 10-module office to 20 or more without the high costs and bothersome delays so often encountered in utility and building alterations.

Modern, efficient facilities like these are expensive. Labor and materials

Deepest basement in new home office building, 50 feet beneath ground level, will house printing and reproduction plant. Workmen consult blueprints for placement of plumbing.



Giant T-beam of pre-stressed concrete swings into position at ground floor of garage site as tower looms in background. Employees will begin to move into new building in mid-1962.

costs have soared in recent years. To illustrate, the Humble building and garage will cost more than the 102-story Empire State building, completed in 1931. The Company's need for the building had to be established by sound economic reasoning. A frequent question is "Why does Humble need a new home office?"

Like other tools of the oil business, a building can cease to serve efficiently its intended purpose. Lightweight drillings rigs of yesteryear, for instance, cannot sink the 20,000-foot-deep wildcat wells of today. By the same token, expanding Humble needs for efficient, economical office space simply have outdated the old home on Main Street. Sold outright, it is being leased by the Company until the big move to the new address.

The new office building will enable Humble to bring about 3,500 home office employees together in one central location. At the present time, various groups of office employees are housed in ten other buildings, some of them more than four miles from the present headquarters building. The new building will enable the Company to improve efficiency and reduce its costs for office space. It will also provide room for expansion in the future.

But why did Humble decide to build in the face of uncertain conditions facing the domestic oil industry?

The answer to this question lies in Humble's absolute faith in the future of the oil industry. Company management believes the industry's depressed period will pass and that long-range prospects are for steady and solid growth. The new Humble Company expects to be a leader in that growth.

The decision to build a new home office was based on studies, dating back to 1955, that indicated it would be more economical to own and occupy a building than to rent the additional space needed for projected growth. Two blocks of property, almost within the shadow of the old Humble building, were purchased in 1957.

At this point, an architectural and engineering firm was retained by the Company. Consulting architects, traffic experts, soil and structural engineers were chosen. Later, bids were received and the general building contract awarded. Down went the excavation and seven-foot-thick slab foundation in the first half of 1960. Up rose the steel skeleton at the Jack-and-the beanstalk rate of about two floors per week.

On January 27 of this year, less than a year after earth was first broken, the symbolic final steel beam was raised 600 feet to the building crown carrying the chalked autographs of Company officials and civic leaders. A 12-foot replica of "Happy," Humble's oil drop symbol, rode the beam in its ascent to climax "topping out" ceremonies.

Now that the steel framework is standing and spring sunshine beams down, building progress has begun to sprint. The pre-cast concrete panels and outriggers are climbing steadily up the building exterior. Elevators are being installed. Materials are arriving in a steady stream. Windows and sun shades will begin to go on this summer. Still ahead: months of inside finish work. Building a 44-story skyscraper is a triumph over a million and one details.

When completed next year, the new Humble building will be a Southwestern landmark combining utility, strength, and beauty. The Roman architect Vitruvius set down these three qualities as the requirements of good architecture 2,000 years ago.

This forward-looking project reflects Humble's confidence in the future of the Gulf Coast region, the U.S. petroleum industry, and the Company's traditional position of leadership. For decades to come, the new building will serve as a focal point for employee pride and a truly outstanding business home for America's largest domestic oil corporation.

HUMBLE PEOPLE SAY

Excerpts from recent talks by Company spokesmen

Industry Faces Problems on the Potomac

"Another legislative session has rolled around, and on the Washington scene—insofar as the oil industry is concerned—it promises to be another year reminiscent of bygone battles. The names and numbers may have changed but our basic problems—and the goals and objectives of our opponents—remain much the same. Once again the halls of Congress will ring with such familiar phrases as national fuels policy, Natural Gas Act, percentage depletion, and gasoline taxes . . . We must continue to bolster our defenses—and one of the best ways of doing that is to spread truth and understanding about our industry and about the contributions that petroleum has made and continues to make to our nation's well-being."

H. P. Pressler, Jr., *Vice President and Manager of Public Relations, before Texas Oil Information Committee, Dallas, February 7, 1961*

Man's Progress Linked to Mastery Over Minerals

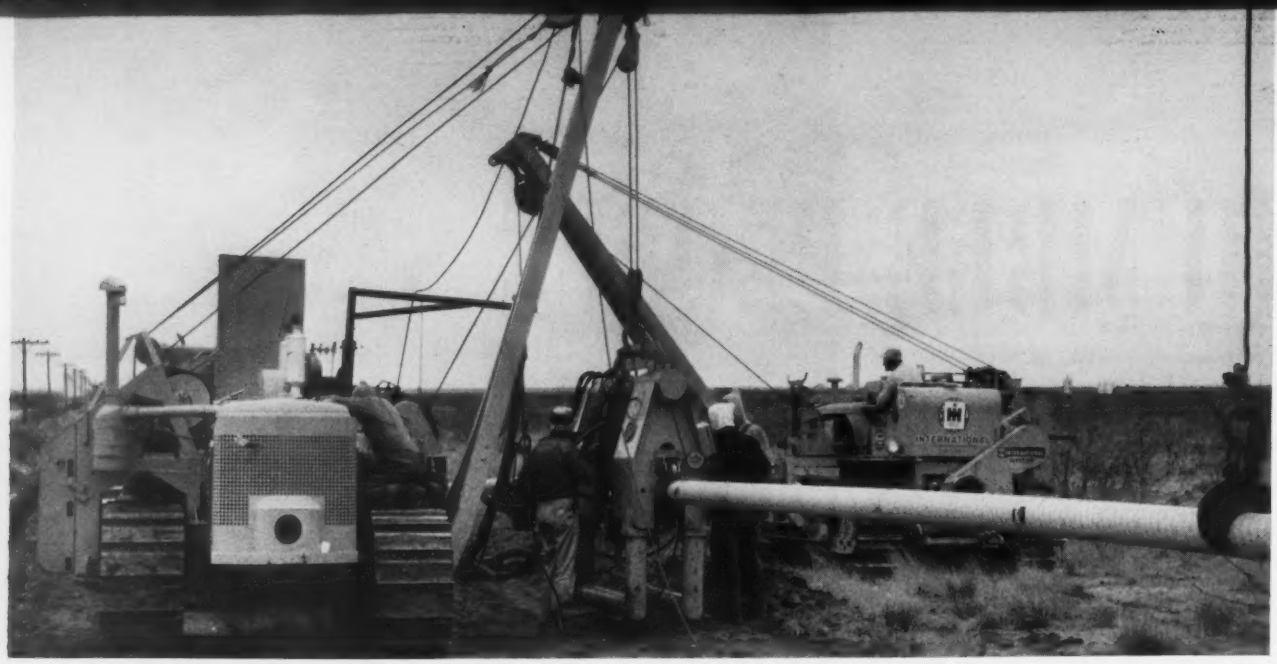
"The tangible factors essential for progress are capital goods and inanimate energy to multiply the productive capacity of man. Production can be increased enormously with machines driven by the power of oil, gas, and coal, and the average American employee in manufacturing now works with equipment worth about $15,000 and representing the energy equivalent of 244 men. This increasing use of minerals has been the material basis which made it possible for us to achieve vast improvements in living standards. . . . Man's progress through the ages has been measured by his mastery over minerals."

Richard J. Gonzalez, *Director, before School of Mineral Sciences, Stanford University, February 27, 1961*

Oil Works to Expand Old Uses, Find New Ones

"In the face of a slower rate of growth in demand, the petroleum industry is working hard to expand the traditional uses of oil and petroleum products. It is also researching and testing a variety of new ones . . . Especially impressive has been the industry's progress in the field of petrochemicals . . . The petroleum industry is also endeavoring to meet the problem of lower gasoline consumption per car by encouraging more automobile travel . . . There is a need, too, for exploring new concepts in retail marketing. We must ask ourselves if our marketing methods are properly oriented in respect to the needs and desires of our customers . . . All of us need to study our industry's problems, to become better informed about them, and to try to make a contribution to sound solutions."

D. W. Ramsey, Jr., *Vice President and Director, before Texas Oil Jobbers Association, Dallas, April 8, 1961*



Field test of automatic welding process was success despite severe weather conditions of West Texas. Using experimental model, researchers (many wearing hoods in bitter cold) welded mile-long section of Humble Pipe Line Company line in vicinity of Odessa.

PUSH-BUTTON WELDING

New process developed by Esso Research and Engineering Company fuses pipeline with speed, strength, and economy

BURIED beneath the soil of our earth is a vast system of underground turnpikes for oil transportation —250,000 miles of petroleum pipelines. This energy-carrying network consists of millions of pieces of individual pipe, connected by the metal magic we know as welding.

Oilmen are always seeking better ways to join these links together. They are also constantly striving to invent machines to do the work. These two aims are neatly achieved in a new automatic welding process developed by the pipeline specialists of Esso Research and Engineering Company at Linden, New Jersey.

Automatic welding has been common practice for flat work in welding shops for several years. Pipeline builders have also employed it for subassembly work in welding yards and at makeshift plants in the field. But their method requires rotating the pipe past a fixed welding head, an awkward and expensive procedure at best.

Now automatic pipeline welding moves out onto the right-of-way for the first time with a highly portable method that combines strength, speed, and relative economy. Esso Research's new process welds joints so strong they can be bent double without breaking. It is twice as fast as other automatic welding and 20 times faster than manual welding.

The economic importance of fast and efficient over-the-ditch welding is suggested by three interlocking facts: (1) Pipelines are the most important method of moving petroleum overland. (2) This year, almost 28,000 miles of pipe (more than enough to circle the globe at the Equator) will be laid in various areas of the world. (3) A weld will be needed every 40 feet, on the average, along the way—3.7 million welds in all.

Oil transportation experts have long looked at the repetitive nature of pipeline welding with an eye toward successful mechanization of the operations. For years, however, knotty metallurgical and equipment problems barred the way to practical automatic welding in the field.

Most of these obstacles are hurdled by the new welding process which M. J. Dabney, pipeline research coordinator at Esso Research, calls "the first major advance in pipeline welding in the field in 25 years." The precision method is indeed a far cry from the early days of pipelining when 40-man tong gangs screwed threaded sections of pipe together by muscle-power. Here's how it works:

First, of course, pipe is strung along the ditch in which it is to be buried. Then a big side-boom tractor lowers the welding machine over two abutted pipe ends to be joined, like a saddle over a horse. The ends are held firmly together and in line by a special alignment clamp inside the pipe.

The machine in position, its operator sights through telescopic crosshairs and makes certain adjustments to line up the joint perfectly. He pushes a button. An air-driven cutting wheel grinds a narrow slot between the pipe ends in two circular half-sweeps. Then sparks fly as an electric arc welder, following the track of the cutter, unites the pipe lengths.

The welded connection looks fragile because it doesn't have the piled-up "dime wide, nickel high" seam called for by traditional visual standards of pipeline construction. But the weld passes every other test with flying colors—X-ray, high pressure, pulling, and bending. Thus the new automatic

welder seems destined to rewrite industry codes.

Already it is making possible new concepts of pipe handling in the field. Instead of welding teams spread out along the pipe for a mile or more, only three men are needed—a welding technician, his assistant, and a tractor operator. Electricity for the arc welder is furnished by an engine-driven generator mounted on a truck that travels along beside the line.

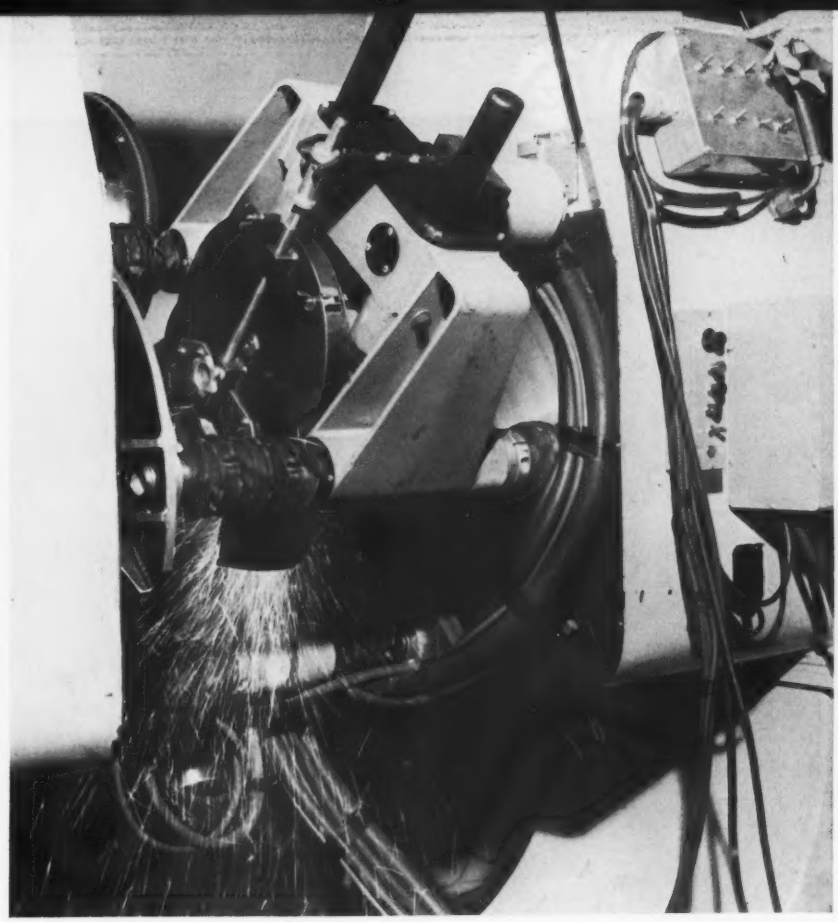
The entire operation of lining up, welding, and moving on to the next joint requires about five minutes (the welding phase, only one minute). At this pace, a trained team can make up about 12 joints an hour, roughly a mile of pipe per day. By contrast, a hand welding contingent of six men can manage about six joints an hour.

This breakthrough in efficiency is the result of several years of research and development work. Cooperating in the research on the new Esso Research process were the Battelle Memorial Institute of Columbus, Ohio; and the Air Reduction Sales Company of Union, New Jersey, which designed and built the prototype automatic welder. Crutcher-Rolfs-Cummings of Houston also participated in the development work.

Researchers working on the new welding implement recently completed a six-month evaluation period climaxed by a successful field test in the oil fields near Odessa, Texas. They put the experimental model through its paces on a section of eight-inch line in Humble Pipe Line Company's system.

"After we scared the jackrabbits and cottontails out of the pipe," recalls Ray Pfrehm, head of Humble Pipe Line research, "there was only the weather to contend with."

The elements played no small role, as it turned out. In the space of a few hours, the field test faced a barrage of severe weather that West Texas is noted for—rain, sub-freezing temperatures, winds up to 30 miles per hour, and blowing sand. Such conditions would hamper or stop conventional welding operations, but the rugged automatic welder toiled on without complaint or coffee break.



Final stage of automatic welding process shows arc welder completing swing around clamped pipe ends. The welding function is completed 20 times faster than if it were done by hand.

The prototype tested at Odessa was designed for use with four to eight-inch diameter pipe. The entire process, however, is being adapted to larger sizes. Sixteen-inch pipe has already been welded without a hitch. A portable machine for massive 30 to 36-inch joints is in design and will be placed in service within a few months. Big pipe is where the automatic welder should begin to pay real dividends.

Currently, the automatic welder is being closely studied for possible modification. Refinements are sure to follow. But the experimental model has already demonstrated the great potential of mechanized welding in the field. In addition, its developers believe the whole idea could be adapted to other oil industry applications—tanker shipbuilding and storage tank construction, for example.

Push-button welding represents significant progress in the costly and complex operation of moving oil and oil products to market. This development further emphasizes the fact that Humble, America's leading energy company, is backed up by the nation's leading petroleum research laboratories.

Welding operator lines up pipe before pressing buttons to set machine into motion. Sturdy prototype weighs 2,500 pounds; later models will weld large-diameter pipe, but weigh less.

Emergency refueling of stalled trucks on highway in New Jersey was accomplished by Linden district employees who loaded diesel fuel into a heating oil truck and delivered it to snowbound vehicles. Truckers had exhausted fuel supplies during traffic tie-up in snowstorm.

A Job Well Done

When snow and ice created emergency conditions, Humble employees met the challenge, maintained customer service

Wading through snowdrifts, employees often made emergency deliveries of heating oil in five-gallon cans. Here a service truck with an oil tank inside is used to make delivery.

IN the eastern region of the United States, the winter of 1960-61 will long be remembered as a bitter season of crippling snowstorms and prolonged cold. It was, in short, a rough one.

The first bone-chilling blizzard swept down on the East late in December; and it was followed in January and February by more heavy snowfalls and long periods of subfreezing temperatures. At times the snow piled up so fast and so deep that traffic was stalled on highways and city streets. For several days in New York City all non-essential vehicles were banned from the streets while crews worked to clear off the mountains of snow. At one spot in Connecticut in January, the temperatures dropped to 26 degrees below zero. The

mighty Hudson River wore a solid sheet of ice so thick that ships and barges could not move. The Coast Guard had to use ice breakers to release the vessels and to open traffic lanes in the ice.

For Humble employees in the Esso Standard Division, the problems of keeping customers supplied under such difficult weather conditions provided a challenge in teamwork and individual initiative. Motor tank salesmen drove their heavy trucks over snow-clogged and ice-covered roads; mechanics kept the equipment rolling under extremely trying conditions; sales people joined with mechanics in making emergency fuel oil deliveries; plant and office people did their part in helping to maintain service to customers.

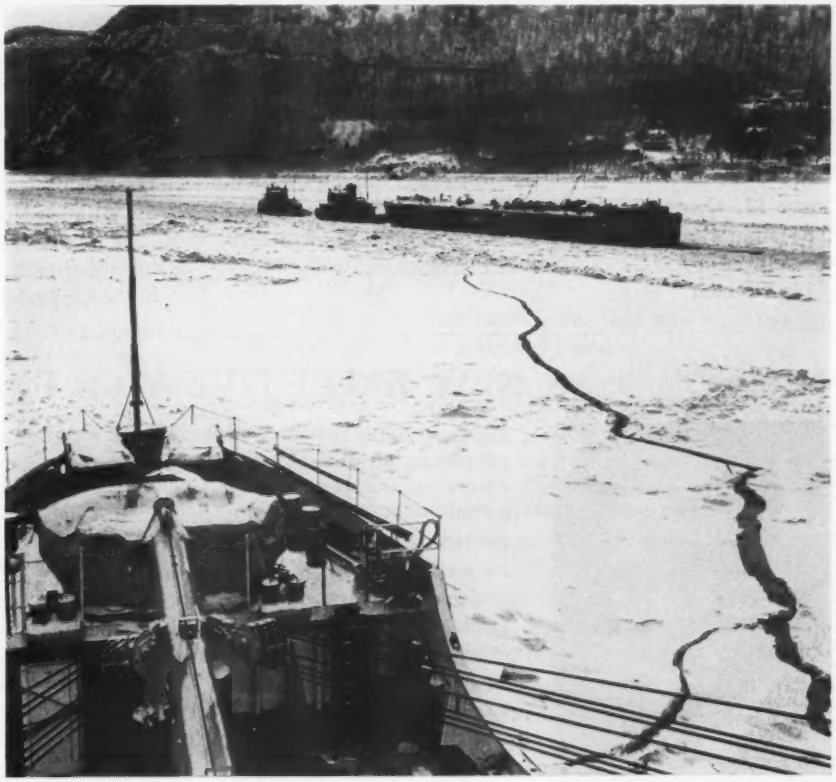
At Humble's Bayway Refinery in New Jersey, the first week-end in February found employees battling around the clock against a 22-inch snowfall which followed 16 days of below-freezing temperatures. Their all-out efforts opened snow-filled streets and kept the refinery in business. Only emergency gasoline deliveries could be made, but all available manpower was pressed into service to deliver heating oil to homes and industries.

Not only Humble, but all oil companies operating in the snowbound area made every effort to keep customers supplied with the essential fuels. When gasoline and heating oil supplies began to run low in some of the communities up the Hudson from New York City, several oil companies and towboat concerns formed a mile-long convoy of river craft which battled its way up the frozen river to deliver more than 5 million gallons of fuel.

On March 21, the first official day of Spring, Humble's Esso Standard Division paid a special tribute to the men and women of the oil industry who had served the public so faithfully throughout the long and bitter winter. The message, carried over 28 radio stations from Boston to Roanoke, said, in part:

"Let's not forget those who plowed through heavy snows to deliver heating oil to keep the home fires burning—and those service station men who labored long to keep their driveways clear so we could 'gas up' when needed. Indeed the entire petroleum industry really 'put a shoulder to the wheel'... It was a job well done."

Night and day, deliveries of heating oil were made to customers in all kinds of weather. Salesmen teamed up with truck drivers to shovel snow and otherwise help serve customers.



Frozen fast in six-inch thick ice on Hudson River, two tugs and barge await help from a Coast Guard ice breaker. Convoy of river craft was formed to deliver fuel to upriver towns.

THE CHANGING ORGANIZATION

PRESIDENT Morgan J. Davis has announced the following executive changes and additions in Humble's corporate management and executive organization:

• H. W. HAIGHT, who had been serving as vice president and director with broad responsibilities for exploration and production, has been elected an executive vice president of the Company.

• J. K. JAMIESON, formerly president of International Petroleum Company, Ltd., has been elected a vice president and a member of the board of directors of the Humble Company. He is also a member of the executive committee.

• NELSON JONES, who had been serving as general counsel, has been elected a member of Humble's board of directors.

Other recent headquarters announcements have included the following:

FORREST M. DARROUGH has been named general counsel to succeed Mr. Jones. He had been serving as associate general counsel.

CARL ILLIG has been elected associate general counsel to succeed Mr. Darrough. Mr. Illig had been serving as a member of the board of management and general counsel of the Humble Division.

DR. VALLIANT C. BAIRD has been appointed to the newly created position of medical director in the headquarters organization of the Company. He had been serving as chief physician of the Humble Division.

HAYLETT O'NEILL has been appointed manager of the Purchasing Department of the Humble Company. He had been serving as purchasing agent for the Humble Division.

JOHN M. CRADDOCK has been appointed manager of the Headquarters General Services Department. He had been manager of the General Services Department in the Humble Division.

Recent staff appointments in various headquarters departments have been announced as follows:

Marketing Department

C. W. BOHMER, JR., headquarters staff coordinator. He had been serving as assistant to the director of marketing.

E. R. SMITH, special marketing projects. He had been serving as assistant to the director of marketing.

A. A. DRAEGER, manager, marketing research and economics. He had been manager of economic and marketing research in the Esso Standard Division.

R. M. GRAY, manager, advertising and sales promotion. He had been manager of advertising and sales promotion in the Esso Standard Division.

C. D. HILL, manager, operations and engineering. He had been acting regional marketing manager in the Central Region.

F. J. HUTCHINGS, credit coordinator. He had been manager of credit coordination in the Esso Standard Division.

G. V. MALLONEE, manager, retail marketing development. He had been area manager of the New Jersey Area, Esso Standard Division.

G. H. SHIPLEY, manager, industrial and specialties sales. He had been general office and consumer sales manager in the Marketing Department of the Southwest Region.

A. P. WILLIAMS, JR., manager, fuel oil sales. He had been area manager of the New England Area, Esso Standard Division.

Exploration Department

W. A. MALEY, assistant to the vice president for exploration. He had been manager of the Exploration Department in the Humble Division.

W. A. BRAMLETTE, coordinator of special studies. He had been assistant manager of the Exploration Department in the Central Region.

A NEW EXECUTIVE VICE PRESIDENT

H. W. HAIGHT

H. W. Haight, Humble's new executive vice president, has had a varied and interesting career in the petroleum industry in four countries. A native of Oklahoma, he attended the Colorado School of Mines where he was graduated in 1927 with a degree in geological engineering. His first job after graduation was as a torsion balance party chief for Cia. Transcontinental de Petroleo, S. A., a Mexican affiliate of Standard Oil Company (New Jersey). By 1937, he was superintendent of production for the northern half of Mexico.

In 1938, Mr. Haight was transferred to Cairo as manager of Standard Oil Company of Egypt, S. A. The following year he was made managing director of this Jersey Standard affiliate.

Leaving Egypt in 1945, he joined Creole Petroleum Corporation in Venezuela as production manager. He was elected president of Creole in 1954, and held this post until early in 1959 when he was named chairman of the board of the Carter Oil Company. In the fall of 1959, he was invited to join the board of directors of the new Humble Oil & Refining Company as a vice president and director. Since then, he has also been serving as a member of the Company's executive committee.

NEW VICE PRESIDENT AND DIRECTOR

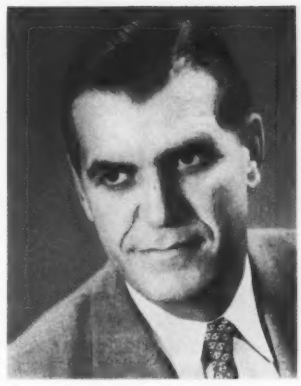
J. K. Jamieson, newly elected vice president and member of the board of directors and of the executive committee of the Humble Company, has had wide experience in all major phases of the petroleum business.

After graduation from Massachusetts Institute of Technology, he worked with two Canadian oil companies, including British American Oil Company. During World War II, he served in the Oil Controller's Department of the Canadian government.

In 1948, he joined Imperial Oil, a Canadian affiliate of Standard Oil Company (New Jersey) as associate manager of the Coordination and Economics Department. He subsequently became head of the company's Engineering and Development Division, and then was made assistant general manager of the Manufacturing Department.

On loan from Imperial to the Canadian government, in 1951, he assisted in the formation of the Petroleum Division of the Department of Defense Production.

Mr. Jamieson was elected a director of Imperial in 1952, and vice president the following year. In January, 1959, he was elected president and director of International Petroleum Company, the position he held until his recent election to the Humble Company's board of directors.



J. K. JAMIESON

W. M. RUST, JR., coordinator of administration and research. He had been assistant chief geophysicist in the Exploration Department in the Southwest Region.

R. W. BYBEE, coordinator of planning and evaluation. He had been area exploration manager in the Midland Area of the Southwest Region.

Manufacturing Department

J. E. GARDNER, JR., manager of fuel products and general planning. He had been administrative superintendent at Bayway Refinery.

T. J. GREANEY, JR., manager of specialty products planning. He had been acting manager of research and development at Baytown Refinery.

Production Department

DOUGLAS RAGLAND, coordinator of engineering and planning. He had been engineering manager of the Production Department in the Humble Division.

M. W. HANKINSON, coordinator of producing investments. He had been assistant chief landman in the Exploration Department of the Humble Division.

FRANK HOLMSLEY, coordinator of conservation and regulation. He had been conservation coordinator in the Production Department of the Humble Division.

HARRY PISTOLE, coordinator of engineering and research application in the engineering and planning section. He had been chief production engineer in the Production Department of the Humble Division.

DALE WOODDY, coordinator of planning and evaluation in the engineering and planning section. He had been planning advisor in the Headquarters Economics and Planning Department.

Employee Relations Department

K. R. DAILEY, assistant manager. He had been manager of the Employee Relations Department of the Humble Division. (Headquarters Employee Relations Department now has two assistant managers. Appointment of J. N. Gorringe as assistant manager had been announced at an earlier date.)

HARRY D. KOLB, head of the personnel development section. He had been head of the employee relations research division in the Esso Standard, Eastern Region.

H. T. HAMBLEN, training coordinator in the personnel development section. He had been head of the training and communications division in the Southwest Region.

J. U. PARKER, chief safety engineer. He had been serving as chief safety engineer in the Southwest Region.

A. ROSS ROMMEL, head of the employee services section. He had been head of personnel placement and services in the Southwest Region.

FAGAN R. SCOTT, head of the salary and wage section. He had been assistant head of the benefits plans section in the Headquarters Employee Relations Department.

Controller's Department

V. R. ROGERS, corporate accounting coordinator. He had been assistant controller in the Humble Division.

W. G. CLARK, budget coordinator. He had been staff assistant in the Headquarters Controller's Department.

G. W. LEISERING, exploration and production accounting coordinator. He had been assistant chief accountant in the production and exploration accounting office in the Humble Division.

C. S. BELL, marketing accounting coordinator. He had been marketing accounting coordinator in the Esso Standard Division.

M. J. WELSH, systems coordinator. He had been general auditor in the Esso Standard Division.

J. A. MOORE, administrative coordinator. He had been assistant chief accountant at Baton Rouge Refinery.

F. J. MILLER, JR., assistant general auditor. He had been acting general auditor in the Humble Division.

Economics and Planning Department

C. S. OVERMILLER, coordinator of economics. He had been serving as assistant treasurer of the Humble Company.

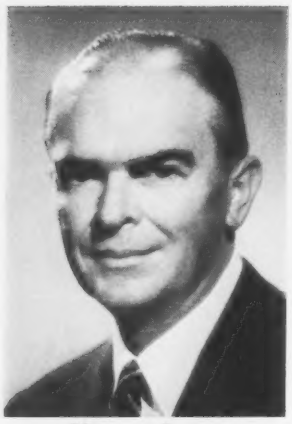
J. R. ARRINGTON, coordinator of corporate analysis. He was already a member of the department.

J. P. HAMILTON, coordinator of investment analysis. He was already a member of the department.

W. M. MCCARDELL, coordinator of long-range planning. He had been chief research engineer in the Production Department of the Southwest Region.

C. D. JONES, coordinator of resource economics. He was already a member of the department.

A NEW MEMBER OF THE BOARD



NELSON JONES

Nelson Jones, new member of Humble's board of directors, is a native Texan with 24 years of service in the Company. He is a lawyer with wide experience in the fields of government regulation of business, law pertaining to the petroleum industry, and court procedure.

Mr. Jones received his bachelor of arts degree from Southern Methodist University in 1929, and his law degree from the University of Texas in 1933. After graduation, he served as an assistant district attorney for the Ninth Judicial District in Conroe, Texas, until 1937, when he joined Humble's Law Department in the trial division.

In 1943, he was named a member of the board of directors of Humble Pipe Line Company, and in 1948 a vice president of that subsidiary. Later in 1948, he became general attorney for the Humble Companies and head of the trial division. In August, 1956, he was named director and general counsel of the old Humble Oil & Refining Company. On December 1, 1959, he became general counsel of the new Humble Oil & Refining Company, and continued to serve in that capacity until his recent election to the board of directors.

Esso Standard, Eastern Region Activated

The Esso Standard, Eastern Region is activated, effective June 1, with W. W. Bryan as vice president in charge and A. A. Diffey as general manager.

Mr. Bryan has appointed the following to key regional staff and area manager positions:

I. E. KILLIAN, regional sales manager. He had been general sales manager in the Esso Standard Division.

E. E. ANDREWS, JR., regional operations manager. He had been operations manager in the Marketing Department of the Esso Standard Division.

R. E. KERESEY, regional general counsel. He had been general counsel of the Esso Standard Division.

N. J. FILLASTRE, regional controller. He had been executive assistant controller in the Esso Standard Division.

B. F. MEGLAUGHLIN, regional public relations manager. He had been manager of the Public Relations Department in the Esso Standard Division.

JASON COOPER, JR., regional employee relations manager. He had been manager of the Employee Relations Department in the Esso Standard Division.

H. D. HARDING, area manager, New England Area (effective August 1). He had been assistant manager of the same area in the Esso Standard Division.

F. G. KADEL, area manager, New Jersey Area. He had been assistant manager of the same area in the Esso Standard Division.

The following have been reappointed to positions already held:

R. L. BRICKEY, area manager, New York Area.

D. F. DICKEY, area manager, Pennsylvania Area.

C. A. NEWLAND, area manager, Delaware-Maryland-District of Columbia Area.

R. E. MCDANIEL, area manager, Virginia-West Virginia Area.

The Ohio Area of Humble Oil & Refining Company will continue under supervision of J. T. Outz, area manager, and with its regional office in New York City.

Central Region Organized

The Central Region has been organized with John W. Brice as vice president in charge and R. O. Goodykoontz as general manager. William F. Eiting, Jr., formerly area manager of the Eastern Area of the Carter Division, has been named assistant general manager of the region.

Mr. Brice has appointed the following key regional staff members and area managers:

W. W. TURNBULL, regional exploration manager. (Formerly manager of exploration, Carter Division.)

O. D. HARPER, regional production manager. (Formerly manager of production, Carter Division.)

R. R. MCCOY, regional marketing manager. (Formerly manager of the Chicago Area, Central Region.)

JOHN O. CAMPBELL, JR., regional crude oil and gas sales manager. (Formerly manager of crude oil and gas sales in the Carter Division.)

R. P. RYAN, regional general counsel. (Formerly general counsel and member of the board of management, Carter Division.)

J. C. LOVELADY, regional employee relations manager. (Formerly Carter Division employee relations manager.)

CONDON MACKAY, regional public relations manager. (Formerly public relations manager, Carter Division.)

DR. T. H. MITCHELL, regional medical director. (Formerly of Carter Division Medical Department.)

L. R. GAMBILL, regional general service manager (Formerly manager, Service Department, Carter Division.)

L. E. PATTEN, regional material and traffic manager. (Formerly manager of material and traffic in Carter Division.)

LEROY YOUNG, regional administrative assistant to the vice president and general manager. (He had been secretary to the Carter Division board of management.)

C. K. ZINNECKER, regional controller. (He had been controller of Carter Division.)

R. E. STEVENSON, regional accounting manager. (He had been assistant manager, Controller's Department, Carter Division.)

H. A. RANZAU, regional tax manager. (He had been manager of the Tax Division, Controller's Department, Carter Division.)

W. M. BARNHILL, regional assistant treasurer of Humble Oil & Refining Company. (He had been treasurer of the Carter Division.)

The Central Region is organized into four areas with area offices located in Denver; Oklahoma City; Chicago; and Mattoon, Illinois. The Chicago Area comprises the former Oklahoma-Pate Division; the Denver Area comprises the territory originally in the Billings and Denver areas.

Mr. Brice has announced the following area managers:

S. E. CHARLTON, area manager, Chicago Area. (He had been assistant manager of the Chicago Area.)

R. D. SLOAN, area manager, Denver Area. (He had been area manager of the Western Area, Carter Division.)

J. J. MULLANE, area manager, Oklahoma City Area. (He had been area manager of the Central Area, Carter Division.)

A. L. DEATON, area manager, Mattoon Area. (He had been assistant chief counsel of the Carter Division.)

Southwest Region Activated

The Southwest Region was established and activated on April 15, with Ray H. Horton as vice president in charge and J. H. Galloway as general manager. At the same time, the former Humble Division was discontinued.

Under the organizational plan previously announced by Mr. Horton, the Southwest Region is organized into five operation areas with area offices in Houston, Dallas, Corpus Christi, Midland, Texas, and Los Angeles, California.

The key regional staff positions and area managers have been announced by Mr. Horton as follows:

R. C. BARBOUR, regional production manager. (Formerly manager, Production Department, Humble Division.)

J. L. LOFTIS, regional exploration manager. (Formerly acting chief geologist, Humble Division.)

J. C. WILBOURN, regional marketing manager. (Formerly assistant manager, Marketing Department, Humble Division.)

D. H. GREGG, regional general counsel. (Formerly general counsel, Humble Division.)

L. H. THOMPSON, regional controller. (Formerly controller, Humble Division.)

J. N. BEASLEY, regional employee relations manager. (Formerly administrative assistant to the vice president and the general manager, Southwest Region.)

J. C. CALKINS, regional purchasing agent. (Formerly assistant purchasing agent of the Humble Division.)

W. E. DOUGHERTY, area manager, Corpus Christi Area. (Formerly acting assistant manager, Exploration Department, Humble Division.)

J. S. BELL, area manager, Houston Area. (Formerly area production manager, Gulf Coast Area, Humble Division.)

H. E. POTTER, area manager, Dallas Area. (Formerly area production manager, East Texas Area, Humble Division.)

J. C. POSGATE, area manager, Midland Area. (Formerly manager, Crude Oil Department, Humble Division.)

Humble's operations in California will continue for the time being under their present organization arrangements. The Monterey Division reports to the vice president of the Southwest Region.

Southeast Region is Activated

The new Southeast Region of Humble Oil & Refining Company was activated and became operational on May 1 with R. H. Venn as vice president in charge of the region and C. G. Herrington as general manager.

The Southeast Region is organized into four areas, with area offices in Jackson, Mississippi; New Orleans; Memphis; and Charlotte, North Carolina.

The Jackson Area office is responsible for supervision of all production and exploration functions in the Southeast Region, except those in South Louisiana and offshore operations. Company offices formerly located at Jackson, Hattiesburg, and Laurel, Mississippi, are being consolidated into a District production and exploration office at Hattiesburg. A District exploration office will also be retained in Shreveport, Louisiana.

The New Orleans Area office is responsible for supervision of production and exploration functions in South Louisiana and offshore; also for marketing operations in the State of Louisiana.

The Memphis Area office will continue to be responsible for supervision of marketing operations in Tennessee and Arkansas.

The Charlotte Area office will continue to be responsible for supervision of marketing operations in the Carolinas.

The following key regional staff positions and area managers have been announced by Mr. Venn:

O. L. FURSE, regional production manager. (Formerly Eastern Area production manager, Humble Division.)

E. A. MURCHISON, JR., regional exploration manager. (Formerly Eastern Area exploration manager, Humble Division.)

E. M. JOLLY, regional marketing manager. (Formerly manager, Tennessee-Arkansas Area, Esso Standard Division.)

C. N. BAILEY, regional controller. (Formerly assistant controller, Humble Division.)

WILLIAM GRANT, JR., regional employee relations manager. (Formerly assistant manager, Employee Relations Department, Humble Division.)

CHARLES JANVIER, regional general counsel. (Formerly area attorney, Eastern Area, Humble Division.)

A. F. KENT, regional public relations manager. (Formerly Information Division head, Public Relations Department, Esso Standard Division.)

JOSEPH V. BRES, administrative assistant to the vice president and the general manager. (He had been assistant manager of the New Orleans Marketing District.)

R. W. GEMMER, area manager, Jackson Area. (He had been serving as area manager of the Billings Area in the Central Region.

T. J. FUSON, area manager of the New Orleans Area. (He had been area production manager of the Houston Area in the Southwest Region.)

F. P. HORTON, acting area manager of the Memphis Area. (He had been assistant manager of the Tennessee-Arkansas Area, Esso Standard Division.)

H. R. DOWD, area manager of the Charlotte Area. (He had been manager of the Carolinas Area of Esso Standard Division.)

Manufacturing Division Organization

Initial steps in forming the organization for Humble's new Manufacturing Division were announced in March by J. P. Warner, vice president and general manager of the Division, with the naming of a six-member organizational staff as follows:

F. D. DENNSTEDT, assistant general manager. (Formerly assistant general manager, Baton Rouge Refinery).

F. M. DOUGHTY, manufacturing coordinator. (Formerly head, Technical Service Division, Manufacturing Department, Esso Standard Division.)

C. H. KOLLENBERG, assistant manufacturing coordinator in charge of planning. (Formerly manager, Coordination Division, Baytown Refinery.)

J. P. Cogan, assistant manufacturing coordinator in charge of economic studies. (Formerly assistant head, Technical Division, Manufacturing Department, Esso Standard Division.)

F. A. Youngs, division controller. (Formerly assistant controller, Esso Standard Division.)

P. E. Kuhl, administrative coordinator. (Formerly assistant general manager, Manufacturing Department, Esso Standard Division.)

The Manufacturing Division office has been established in the Americana Building in Houston pending completion of the new Humble Building next year.

Mr. Warner also has announced the following organization changes, effective June 1:

G. R. Murrell, manager of the Bayway Refinery has accepted an assignment with Standard Vacuum Oil Company.

W. J. Sheridan, presently manager of the Everett Refinery, will become manager of the Bayway Refinery.

J. J. Coates, presently manager of the Pittsburgh Plant, will become manager of the Everett Refinery.

R. B. Winkel, presently operations superintendent of the Bayonne Plant, will become manager of the Pittsburgh Plant.

Natural Gas Division Established

A new operating group, the Natural Gas Division, was created in Humble's headquarters organization in February, with responsibility for all sales of natural gas by the Company.

W. J. Greenwald was named general manager of the new Division, and John J. Carter was named manager. Mr. Greenwald has been serving as acting assistant manager of Producing Investment Coordination in the Humble Division. Mr. Carter had been serving as manager of the Humble Division's Gas Department.

In mid-April, Mr. Greenwald announced an organization plan for the Natural Gas Division, naming three coordinators as follows:

W. D. Moore, economics and planning coordinator. Formerly, he was senior supervising engineer in charge of long-range planning in the Production Department, Humble Division.

W. E. Curry, Jr., negotiating and marketing coordinator. He had been contract supervisor in the Gas Department, Humble Division.

J. R. Suman, Jr., supply and FPC coordinator. He was formerly coordinator of gas supply in the Gas Department, Humble Division.

Marine Division Moves to Houston

Humble's Marine Division, a new Division created out of the former Marine Department of the Esso Standard Division, has now been activated and has transferred its office from New York to Houston. Pending completion of the new Humble Building, the Marine Division occupies quarters in the nearby Americana Building.

John D. Rogers is general manager of the Marine Division, and J. E. Stoveken and Sydney Wire are assistant general managers. Captain Milton Breece, formerly manager of Humble's Port of New York office, has been named operations manager of the Marine Division.

No change in the day-to-day operations of the Division is indicated by the move to Houston.

The Humble Way

Vol. XVI No. 3

Spring, 1961

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HUMBLE OIL & REFINING COMPANY

P. O. Box 2180, Houston 1, Texas

Board of Directors

John W. Brice — J. K. Jamieson
Morgan J. Davis — Nelson Jones
H. W. Ferguson — William Naden
R. J. Gonzalez — D. W. Ramsey, Jr.
H. W. Haight — E. D. Reeves
C. E. Reistle, Jr.

Officers

Morgan J. Davis, *President*

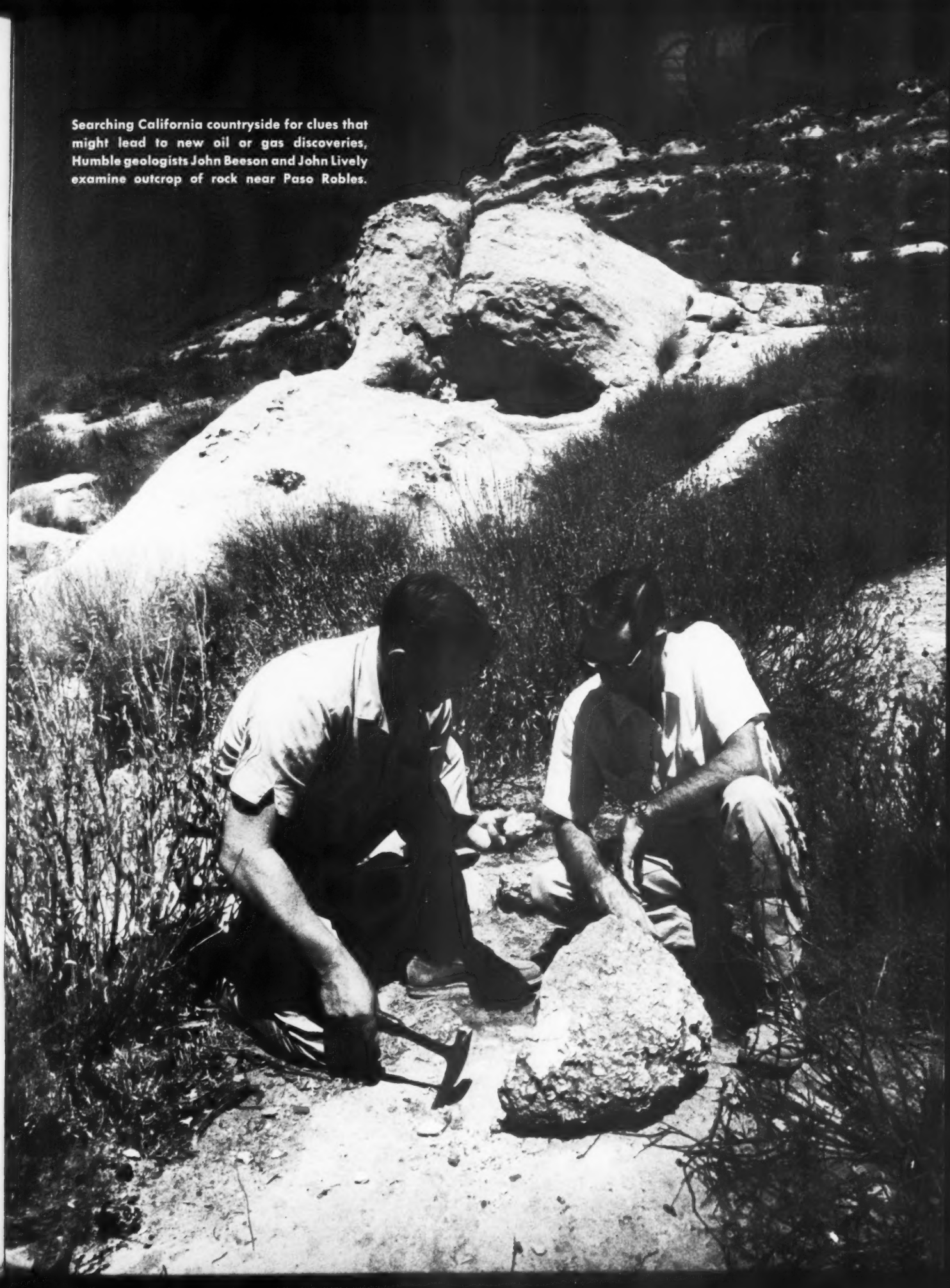
Executive Vice Presidents

C. E. Reistle, Jr. — William Naden — H. W. Haight

Vice Presidents

John W. Brice — Ray H. Horton — R. J. Schilthuis
W. W. Bryan — J. K. Jamieson — J. L. Seger
H. W. Ferguson — T. W. Moore — R. H. Venn
M. W. Haas — H. P. Pressler — H. J. Voorhies
F. A. L. Holloway — D. W. Ramsey, Jr. — J. P. Warner
E. D. Reeves

Forrest M. Darrough, *General Counsel*
O. L. Luper, *Controller*
Lester R. Moore, *Treasurer*
L. J. Weigle, *Secretary*



Searching California countryside for clues that might lead to new oil or gas discoveries, Humble geologists John Beeson and John Lively examine outcrop of rock near Paso Robles.

The Humble Way
P. O. Box 2180, Houston 1, Texas

BATHED IN SUNSHINE

a watercolor by Emil J. Kosa, Jr.

In this painting, California artist Kosa gives his impression of a sunlit scene in one of the older areas of Los Angeles. A few blocks from this spot, teeming freeways converge on the heart of the city near the City Hall, which towers in the background. Many of Los Angeles' older buildings are now giving way to new construction in the nation's fastest-growing metropolis. See story on Southern California inside.